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Peyman

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(54) **METHOD AND APPARATUS FOR ACCOMMODATING INTRAOCULAR LENS**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1643 days.

This patent is subject to a terminal disclaimer.

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Related U.S. Application Data

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A61F 9/02 (2006.01)

(52) **U.S. Cl.** **606/4**; 128/898

(58) **Field of Classification Search** 606/4–6, 606/10–15; 623/6.11–6.24, 6.27–6.56, 6, 623/61

See application file for complete search history.

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(57) **ABSTRACT**

A method of replacing a natural lens in an eye is presented. The method includes removing the natural lens while leaving the capsular bag substantially intact, removing a portion of the capsular bag along the main optical axis, and placing biodendrimer within the capsular bag. Placing biodendrimer within the capsular bag can include placing a mixture of biodendrimer and at least one other material within the capsular bag. Biodendrimer can be approximately fifty percent of the mixture. The method can also include inserting an artificial bag within the capsular bag, injecting a synthetic material into the artificial bag to form an artificial lens, the synthetic material having loose monomers and a polymerization initiator so that the synthetic material changes its volume when exposed to an energy source, and selectively exposing portions of the artificial lens to an energy source to alter the refractive properties of the artificial lens.

22 Claims, 12 Drawing Sheets